	Туре	#	Hits	Search Text	DBs	Time Stamp	Comm I	Error E Defin r ition r	ro ro
μ	BRS	L1	283	molecular adj switch	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/07/0		0	
N	BRS	L2	9218	(transcription adj factor) or (transcriptional adj regulatory adj protein) or (transcriptional adj regulatory adj factor) or (DNA adj binding adj protein)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/07/0		0	
ω	BRS	L3	61	1 same 2	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/07/0 8 14:39		0)
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FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT

14:56:25 ON 08 JUL 2002

- L1 3583 S MOLECULAR SWITCH
- L2 350882 S (TRANSCRIPTION FACTOR) OR (TRANSCRIPTIONAL

REGULATORY PROTEIN

- L3 221 S L1 (P) L2
- L4 64328 S TRANSGENE
- L5 5 S L3 (P) L4
- L6 2 DUPLICATE REMOVE L5 (3 DUPLICATES REMOVED)
- L7 861966 S GENE EXPRESSION
- L8 44711 S L2 (P) L7
- L9 626 S L8 (P) L4
- L10 223 S DNA BINDING COMPOUND
- L11 1 S L9 (P) L10
- L12 1 S L3 (P) L10
- L13 0 S L12 NOT L11

 $[\]Rightarrow \log y$

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=> s (transcription factor) or (transcriptional regulatory protein) or (transcriptional regulatory
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=> s transgene
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                                   MEDLINE
DOCUMENT NUMBER:
                    21402890
                              PubMed ID: 11397804
TITLE:
                    Depolarization strongly induces human cytomegalovirus major
                    immediate-early promoter/enhancer activity in neurons.
AUTHOR:
                    Wheeler D G; Cooper E
CORPORATE SOURCE:
                    Department of Physiology, McGill University, Montreal,
                    Quebec H3G 1Y6, Canada.
SOURCE:
                    JOURNAL OF BIOLOGICAL CHEMISTRY, (2001 Aug 24) 276 (34)
                    31978-85.
                    Journal code: 2985121R. ISSN: 0021-9258.
PUB. COUNTRY:
                    United States
                    Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:
                    English
FILE SEGMENT:
                    Priority Journals
ENTRY MONTH:
                    200109
ENTRY DATE:
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Entered Medline: 20010920 AΒ Activity-dependent changes in gene expression involving the

Last Updated on STN: 20010924

Entered STN: 20010821

brain. The human cytomegalovirus major immediate-early promoter/enhancer (hCMV promoter), rate-limiting for productive cytomegalovirus infection, contains five cAMP-response elements (CREs). Indirect evidence suggests that this promoter does not function in unstimulated neurons. Here we test the hypothesis that expression from the hCMV promoter in neurons is induced by membrane depolarization. For these experiments, we infected cultured sympathetic and hippocampal neurons with hCMV-green fluorescent protein (GFP) promoter/reporter constructs using adenoviral gene transfer techniques and measured ***transgene*** expression by quantifying GFP fluorescence and GFP mRNA levels. We found that depolarization up-regulates promoter activity by >90-fold. Moreover, our results from pharmacological experiments suggest that this induction occurred through a CREB-dependent pathway. Importantly, site-directed mutagenesis of all five CREs in the promoter blocked this up-regulation almost completely, whereas mutating four of them had no effect. We conclude that the hCMV promoter ***switch*** in neurons and is strongly acts as a ***molecular*** induced by membrane depolarization, neuronal activity, or other stimuli that activate CREB. These results may provide insight into molecular mechanisms of cytomegalovirus-related diseases of the brain.

L6 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2000:628284 CAPLUS DOCUMENT NUMBER: 133:233573

TITLE: Inducible regulatory systems for control of gene

expression

INVENTOR(S): Lim, Moon Young; Edwards, Cynthia A.; Fry, Kirk E.;

Bruice, Thomas W.; Starr, Douglas B.; Laurance, Megan

E.; Kwok, Yan

PATENT ASSIGNEE(S): Genelabs Technologies, Inc., USA

SOURCE: PCT Int. Appl., 92 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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KIND DATE
    PATENT NO.
                                       APPLICATION NO. DATE
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WO 2000052179 A3
                                       WO 2000-US5728 20000303
                          20000908
                          20001221
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PRIORITY APPLN. INFO.:
                                     US 1999-122513P P 19990303
                                     US 1999-154605P P 19990917
                                     WO 2000-US5728 W 20000303
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AB Inducible gene expression systems regulated by a ligand are described. The system includes a nucleic acid construct which has a DNA response sequence for a ***transcriptional*** ***regulatory***

protein operably linked to a promoter, a compd. binding sequence in the vicinity of the DNA response sequence, a ***transgene*** under the control of the promoter; and a DNA binding compd. In some cases, the ***mol*** . ***switch*** system further includes a nucleic acid

sequence encoding a ***transcriptional*** ***regulatory***

protein operably linked to a second promoter. The invention further provides a method for screening compds. for the ability to function in the ***mol*** . ***switch*** system and thereby regulate gene expression.

(FILE 'HOME' ENTERED AT 14:55:55 ON 08 JUL 2002) FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT 14:56:25 ON 08 JUL 2002 L13583 S MOLECULAR SWITCH L_2 350882 S (TRANSCRIPTION FACTOR) OR (TRANSCRIPTIONAL REGULATORY PROTEIN L3 221 S L1 (P) L2 64328 S TRANSGENE L45 S L3 (P) L4 L5 2 DUPLICATE REMOVE L5 (3 DUPLICATES REMOVED) => s gene expression 4 FILES SEARCHED... 861966 GENE EXPRESSION => s 12 (p) 17 L844711 L2 (P) L7 => s 18 (p) 14 626 L8 (P) L4 => s DNA binding compound 223 DNA BINDING COMPOUND => s 19 (p) 110 1 L9 (P) L10 L11 => s 111 1 ibib abs MISSING OPERATOR L11 1 IBIB The search profile that was entered contains terms or nested terms that are not separated by a logical operator. => d l11 1 ibib abs L11 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS 2000:628284 CAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: 133:233573 TITLE: Inducible regulatory systems for control of gene expression INVENTOR(S): Lim, Moon Young; Edwards, Cynthia A.; Fry, Kirk E.; Bruice, Thomas W.; Starr, Douglas B.; Laurance, Megan E.; Kwok, Yan PATENT ASSIGNEE(S): Genelabs Technologies, Inc., USA SOURCE: PCT Int. Appl., 92 pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION: APPLICATION NO. DATE PATENT NO. KIND DATE ----------_____ A2 WO 2000052179 20000908 WO 2000-US5728 20000303 WO 2000052179 A3 20001221 W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,

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                                      US 1999-122513P P 19990303
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                                      WO 2000-US5728 W 20000303
    Inducible
                ***gene***
                              ***expression*** systems regulated by a
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ligand are described. The system includes a nucleic acid construct which has a DNA response sequence or a ***transcriptional***

***regulatory*** ***protein*** operably linked to a promoter, a
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        ***transgene*** under the control of the promoter; and a ***DNA***

***binding*** ***compd*** . In some cases, the mol. switch system
      further includes a nucleic acid sequence encoding a
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      linked to a second promoter. The invention further provides a method for
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L10
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L7 L8

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